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The World's Best Roses

Pedigreed, Hand-Hybridized Dahlia Seed

(Seed and Pollen Parent Known)

Hybridized Gladiolus Seed

Honor-Roll Dahlias

(Used for Pedigreed Seed Production)



Treatise on Dahlia Hybridization
The Padre's Own New Rose Productions

A Plea for a National Botanic-Genetic Rose Garden

Do not fail to read it

The Padre's Botanical Gardens

125 South Milpas Street
SANTA BARBARA, CALIFORNIA

A Word of Introduction

Although the former experimental grounds were greatly reduced last April first, 1930, the Padre managed to grow at least the most prominent Dahlia varieties, so that he can offer again to his many friends his well known pedigree Dahlia seed, both parents known. But since the planting was so small the supply of seed is very limited, and hence those readers particularly anxious to get some seed should send in their orders at once.

There are also a few Dahlia roots we can offer. As all yet available space is needed for rose breeding, we allow this time the most liberal discount of 50%, but our own selection, and only on orders amounting to \$20.00, cash sent with order.

By this time it ought to be an appreciated fact that the mere collection of Dahlia seed from the best varieties, is not all that is necessary for a sure result, but that it *takes two superior parents*, namely a seed—and pollen parent, or in other words a full pedigree, to insure at least a plausible results for still superior hybrids.

At this time the Padre desires to make a special appeal to the members of the American Rose Society in a vigorous campaign to assist him in the production of breeding new roses, mostly from our own native species, as we want *American Born Roses*, also in a move of more systematized planting, and above all in the establishment of a National Rose Garden to be the center of all rose activity in this country.

The Padre feels sure that the only safe method to insure better roses for every local need, from ocean to ocean, is by breeding and raising them right here under our own eyes according to specific local and climatic conditions, and, wherever possible, to use our own wild species as a basis for such work.

As far as limited space will permit, the breeding of Dahlias, as heretofore, shall be carried on with the same great care. Do not fail to read the special treatise on the hybridization of Dahlias. While this treatise makes the scientific breeding of Dahlias clear, it may be said that the members of the American Rose Society and any rose lover may read it with great profit as the rudiments of breeding are very much alike, with one exception that we have in the Genus Rosa thousands of untried species, over 100 on the American continent alone, but mostly found in their natural state in Asia. And for doing rose breeding in this country with the greatest profit for the vastly different local needs, first of all a National Rose Garden is necessary in which all the rose species for comparison can be collected, and the newly bred varieties tested out.

To make a start with a National Rose Garden the Padre offers the original rose seedlings from over 700 different combinations in nearly 20,000 plants, every one distinctly different and with the exact pedigree, as a nucleus of plant material for such a garden, under the condition that this garden will be established in California, and will remain to be permanently devoted for the purpose of Rose Science.

Do not fail to read in this pamphlet, "Something About the Padre's Own Productions" and "A National Botanical Genetic Rose Garden for America," speaking more at large on this important subject.

On this occasion the Padre wishes to thank his many friends for their encouragement he has received in his work of plant breeding in the last twenty years. Without this encouraging support, very little or nothing could have been possible. He ventures to ask everyone for a generous continuance of their favor towards a noble cause, *A National Rose Garden*.

Address all communications to Rev. Geo. M. A. Schoener, 125 So. Milpas St., Santa Barbara, California.

Yours for better Roses and Dahlias through carefully bred seed.

THE PADRE.



THE PADRE STUDYING A POT FULL OF HYBRIDIZED ROSE HIPS,
WITH THEIR PEDIGREE TAGS HANGING ON THEM

The Best That Is Known Today in Roses

HYBRID TEAS, HYBRID PERPETUALS AND PERNETIANAS

Including their Best Novelties Since the Last Three Years

For many rose lovers it seems overdone to put every year such a large number of new varieties on the market. But looking at it right, we all must admit that it is the only method to push ahead for still better roses, for every section of the country, for every garden in America. And we think we can state with good faith that every year brings new surprises. How could you have ever dreamed of such colors in roses as in the Lyon Rose, in Padre, in Talisman and in many others without the never ceasing breeding trials made by enthusiastic rose breeders? Granted that some new varieties are overly praised by their raisers, a good proportion always remains to present a vast step forward, and hence rose breeding must go on and must be encouraged.

Furthermore, as it can be well judged from the small list here offered, only the very best out of thousands were selected, having felt the duty for the protection of customers to offer only what we can recommend as being of exceptional merit, and in many ways better than older varieties, especially in brilliancy and novelty of color.

We give here only the briefest description, feeling that most of the members of the American Rose Society are familiar with the varieties offered through referendum descriptions and discussions in the Rose Annuals.

Since it has become the particular aim of the Padre to breed systematically new roses for every district of America, it will be appreciated as a great favor to keep him posted about their performance in the distinctly different climatic sections of the country, assisting him thereby to make certain varieties the basis for further development with particular reference to local needs by using them either as seed—or pollen parents with wild rose species found in the respective sections, because only thus it will be possible to provide at last satisfactory roses for the North and South, East and West. It is most strange that is not realized at all that only by breeding our own roses in our own country, according to our local needs, will we ever get forward in rose culture. The Padre sincerely hopes that every member is well aware of the fact that in his venture for better roses there is surely no money making in back of his hard work, doing at least his mite in the good work.

Price of the acknowledged best standard market varieties, such as Kaiserin Augusta, Frau Karl Druski, etc., 75 cents each, \$6.00 for 10, except where otherwise noted.

Price of Novelties, latest introductions of 1929, 1930 and 1931, 250, \$20.00 for 10, except where otherwise noted.

Novelties prior to 1928 correspondingly lower in price.

N. B.—All plants are extra strong two year old field grown either budded or grafted on hardy stock.

N. B.—As a special proposition to encourage rose breeding in this country, kindly read the great discount allowances made to the members of the American Rose Society, not only offering them the finest roses at a greatly reduced price from the regular list, but also affording them an opportunity to help along a noble enterprise, most sorely needed in this country, to make the Rose our national flower.

N. B.—By all means do not delay ordering as the supply is very limited, only 5000 plants on hand.

Kindly realize the bargain you get by making your order at least \$20.00 cash sent with the order, and then in addition to this being entitled for a surely worth while bargain, plus extra plants to cover express charges.

Two year old plants, somewhat smaller than the specimen plants, only 60 cents, \$5.00 for 10 plants; such varieties as Wm. R. Smith, Frau Karl Druski, Lady Plymouth, etc.

Following are the varieties:

ANGEL PERNET, Per. 1925. Brownish orange blooms of excellent shape. Well known.

ANNIE LAURIE, H. T. 1922. A fuller Butterfly, lively pink and yellow.

ANTOINE RIVOIRE, H. T. 1895. Pale, silvery pink, often shaded lilac. Fine.

ARIEL, H. T. 1921. Large, Globular flowers of orange-flame and yellow.

BETTY UPRICHARD, H. T. 1922. Copper-red buds. Strong growing. Good blooming.

CHARLES K. DOUGLAS, H. T. 1919. Fine, long pointed buds of crimson-scarlet.

CHATEAU DE CLOE VOUGEOT, H. T. The well known blackish scarlet rose. Fine.

CRIMSON QUEEN, H. T. 1912 Slender, delicately pointed buds of rich crimson.

CUBA, Per. Vivid orange-scarlet buds, opening to immense flowers. Extremely free blooming.

One of the showiest roses grown.

DAME EDITH HELEN, H. T. Shapely, high-centered blooms of clear pink. Excellent.

DORIS DICKSON, Per. Double flowers of orange-cream flushed with crimson. Stems stiff and wiry. Vigorous and prolific. 80 cents.

DUCHESSE OF YORK, Per. Buds and flowers of refined form. Color is a deep yellow, with tangerine-orange. Fully reliable. Very floriferous. \$1.00.

DUCHESS OF WELLINGTON, H. T. Enormous tapering buds of golden orange. Vigorous.

EDITH NELLIW PERKINS, Per. A beautiful two-toned rose of light crimson shaded with delicate salmon-pink. Good form. Sweetly scented. 80 cents.

E. G. HILL, H. T. Immense size, new scarlet, well shaped, very free growing, \$1.50.

EMPIRE QUEEN, H. T. 1925. Large ovoid buds, very lasting of fine cerise, \$1.50.

ERICH HOLYROOD, H. T. Unusual color of pink on stained golden yellow. Excellent growth and good foliage. Grand novelty. 80 cents.

ETHEL SOMMERSET, H. T. Coral and shrimp pink blooms of splendid form.

ETOILE DE FEU, Per. Large cupped flowers of flaming orange similar to Catherine Breslau, but better form. Beautiful glistening foliage.

ETOILE DE HOLLAND, H. T. Brilliant red blooms of magnificent size. Perfect shape.

FEU JOS. LOOYMANS, Per. Long, pointed buds of orange buff. Growth strong.

FORT BRAGG, H. T. A very good silvery pink all around garden rose, \$1.00.

FRAU KARL DRUSKI, HP. Needs no introduction as the best hardy white rose.

GAIETY, H. T. Would call it an improvement over Golden Emblem. Very fine, \$1.50.

GEN'L MACARTHUR, H. T. Is well known as our best red garden rose. Fragrant.

GEO. ARENDS, H. P. A pink Druski of the greatest merit. Fine shapely buds.

GOLDEN EMBLEM, Per. Intensely yellow buds of superb shape and texture.

HADLEY, H. T. A rich crimson-red flower of good form and perfume.

HARRY KIRK, T. Lovely buds of elegant shape of deep straw yellow color.

HOOSIER BEAUTY, H. T. Splendid, dark red blooms of impecable shape. Fragrant.

INDEPENDENCE DAY, Per. Flaming yellow buds. Strong, upright growth.

IRENE HENNESEY, H. T. Brilliant orange-flame. Perfect form and strong growth. Of the newer roses this is one of the best. Free from mildew.

IRISH FIREFLAME, H. T. Probably the best single rose in existence. Orange-pink.

ISOBEL, H. Y. Exquisitely pointed buds of carmine-orange. Single. Strong growth.

JEAN C. N. FORESTIER, Per. Globular blooms of carmine-orange. Vigorous plant.

JOHANNA HILL, H. T. Golden yellow, long tapered buds. Excellent cut rose. \$1.50.

JONKHEER J. L. MOCK, H. T. Carmine buds of gigantic size and good form. Pink.

KAISERIN AUGUSTA VICTORIA, H. T. Still considered the best white rose.

LA FRANCE, H. T. Bright pink flowers of excellent shape and sweet fragrance.

LADY HILLINGTON, T. Still unrivalled in its orange yellow and fine buds.

LADY MARGARET STEWART, Per. Large exhibition blooms of golden yellow, \$1.00.

LADY PLYMOUTH, T. This exquisite yellow Tea Rose should be better known. It is considerably hardy, never out of bloom, and totally mildew immune.

LORD CHARLEMONT, H. T. Very large, beautifully formed crimson flowers on stout stems. No doubt one of the best red garden roses.

LOS ANGELES, Per. Very lovely buds of exquisite salmon pink. Strong growth.

LOUISE CATH. BRESLAU, Per. Remarkably bright buds and blooms of reddish orange.

LYON ROSE, Per. Still unsurpassed in its shrimp-pink color. Very large flower of superb form. Unfailing bloomer. No other rose color like it.

MABEL MORSE, H. T. Unstained yellow buds of perfect shape and fine fragrance.

MARGARET McGREDY, Per. A brilliant colored masterpiece of glorious orange-scarlet.

Beautiful heavy foliage contrasts artistically with the dazzling flowers. One of the most outstanding roses in recent years. 80 cents.

MARIETTA S. JORONICA, H. T. A most excellent, delicately shaped new pink. \$1.50.

MAUD CUMING, Per. Long, tapering buds of enormous size of rich coral pink, \$1.00.

MISS LOLITA ARMOUR, Per. Burnished buds and creamy copper flowers. Grand.

MME. LEON CONSTANTIN, G. H. Extremely large flowers of fine form, delicate creamy yellow with pink reflexes. Very healthy, strong grower, free from mildew and fairly hardy. Continuous in bloom.

MME. ALEX. DREUX, Per. Intensely yellow buds and high centered flowers. Fine.

MME. EDOUARD HERRIOT, Per. Sparkling buds of coral-red and orange. Good growth.

MME. MELAINE SOUPERT, H. T. Extremely large buds of most refined form. Yellow.

MRS. A. RICARDO, H. T. Very large, full blooms of pale pink and yellow.

MRS. HENRY BOWLES, H. T. Ovoid buds of clear, piercing pink. Fine form. \$1.00.

MRS. HENRY MORSE, H. T. A bright flower of contrasting tones of pink and yellow.

MRS. HERBERT STEVENS, T. Double white flowers tinted with pale lemon yellow.

Blooms well, and is hardy for a Tea. The shape of flowers is perfection.

MRS. LOVELL SWISHHER, H. T. Its long, exquisitely formed buds of a deep coppery salmon stamp this variety as of exceptional merit. Strong growth.

MRS. REDFORD, H. T. Perfectly shaped buds of bright orange and apricot.

MRS. S. K. RINDGE, Per. Long, yellow buds, striped with red. Good bloomer.

OPHELIA, H. T. The rose after which the most new introductions were patterned. Primrose-yellow, shaded rose color in center. A very beautiful variety.

PADRE, Per. Coppery-scarlet, with bright yellow at base. Constant bloomer.

PILGRIM, H. T. Well known as a fine pink cut rose of good growth and fragrance.

RADIANCE, H. T. Brilliant rose-pink buds. Its splendid growth is well known.

REV. F. PAGE ROBERTS, Per. Copper-red buds of great length. Strong growing.

RICHARD WEST, H. T. Symmetrical flowers of light yellow. Plant very vigorous. As a reliable garden rose it has few equals.

ROSELANDIA, H. T. Typical Ophelia buds and blooms of rich golden yellow.

SHOT SILK, Per. Fine buds of coppery rose with apricot and yellow. Fragrant.

SOUV. DE CL. PERNET, Per. Fine buds of fadeless yellow. Plant erect and strong.

SOUV. DE GEORGES PERNET, Per. Brick-red buds of immense size. Rich fragrance.

SOUV. DE MME. BOULLET, H. T. Flower large, full, dark yellow. Fine shape.

SOUVENIR DE MME. H. THURET, H. T. Perfectly formed buds, opening to salmon-pink, center shrimp-red. Strong growth, and persistent foliage.

SUNSTAR, H. T. Deep orange and yellow flowers, edged vermillion. Good bloomer.

TALISMAN, H. T. Like a choice, rare cameo of rich red on yellow ground, \$1.00.

THE QUEEN ALEXANDRA, Per. Scarlet on inside, and yellow on outside of petals.

TIM PAGE, Per. Daffodil-yellow flowers. Erect growth, glossy foliage, \$1.00.
VESUVIUS, H. T. Single flower of the most sparkling scarlet. Fine, upright growth.
VILLE DE PARIS, Per. Round buds of clear yellow. Plant notably tall and clean.
ULRICH BRUNNER, H. P. The best counterpart of American Beauty for outdoors.
WM. KORDES, Per. High-centered flowers of deep golden salmon. Vigorous. \$1.00.

Besides these here listed we have also yet in small quantities such well known and always reliable roses as Sunburst, Wm. R. Smith, Mme. Jules Bouche, M. Antoine Marie, Duchess of Sutherland, etc. etc. Just let us know what varieties you are particularly interested in, and we feel sure we can help you, allowing a most substantial discount, amounting to you as low as only wholesale price. There are over 800, odds and ends on hand. As there is no more ground for them they are sold practically at any price.

POLYANTHA ROSES

CHATILLON, 1923. Bright pink with an illuminating touch of orange. Very pretty.
ECHO, 1914. Flowers soft pink. Virtually an everblooming dwarf Thousandschoen.
ORANGE KING, 1923. Decidedly a most unusual color-break in the Polyanthas.
SALMON SPRAY, 1928. Rich salmon-pink flowers. Constant-blooming. Healthy.
ELLEN POULSEN, 1912. Fairly full flowers of bright rose-pink. One of the best.

CLIMBING ROSES

With the exception of Belle of Portugal, Fortune's Yellow and Marechal Niel, being tender, all of them are hardy. But for California and other Southern states there is simply nothing better than such a gorgeous rose as Belle of Portugal, and similar Gigantea Hybrids.
ALLEN CHANTLER, 1924. Most effective vivid scarlet pillar rose. Excellent.
BELLE OF PORTUGAL, Gigantea Hybrid. Most spectacular salmon pink of gigantic growth with almost evergreen foliage. The flowers are of immense size and of the most perfect shape.
Unlike any other rose. Do not miss it.

BREEZE HILL, 1927. Different from other hardy climbers. Yellow and apricot shaded flowers of large size for this type. Fine glossy foliage.

CLB. CECIL BRUNNER. The most exquisite small buds in large clusters of rosy pink and yellow. Of healthy growth and never out of bloom.

CHERUB, 1928. Almost thornless. A most abundant bloomer of exquisite salmon pink flowers coming in immense clusters.

CLB. GEO. SAWYER, H. T. Long buds, finely formed, and of brilliant rose. Plant is very vigorous and free blooming. Highly recommended and fairly hardy.

EVANGELINE, 1906. Single flowers with dainty reflexed petals of rosy white. Clusters very large and abundantly produced by a strong plant.

EMILY GRAY, 1918. Large, semi-double, deep golden buff flowers, practically unfading. Wonderfully pointed and polished foliage like holly. Most excellent.

FORTUNE'S DOUBLE YELLOW, 1845. One of the most gorgeously colored roses of reddish-yellow, pink and brown. An enormous grower. Fully free from mildew.

MME. GREGOIRE STAECHELIN, 1930. The first really fragrant, very large, hardy Hybrid Tea Climber of a delicate pink color, trained crimson outside. \$1.50.

MARECHAL NIEL, 1864. Lovely buds of deep golden yellow; double and extremely fragrant. Very strong grower. A rose that should be grown everywhere in the milder sections of the country.

PAUL'S SCARLET, 1916. Intense scarlet flowers of excellent shape, borne in small trusses. Plant of moderate growth. Very liberal bloomer.

STAR OF PERSIA, Hybrid Austrian Briar. Semi-double, bright yellow flowers, almost none fading. A very splendid novelty.

TAUSENSCHOEN, H.M. Charmingly ruffled flowers of many shades of yellow, creamy white and bright rose-pink. Will sell at only \$6.00 per dozen, largest size plants, adding yet two more to pay express charges.

THELMA, 1927. Clusters of 3 to 18 flowers of delicate coral-pink lasting for ten days in cut state. Healthy growth. \$1.00.

MADAM PLANTIER. The old reliable memorial rose.

SOUVENIR DE CLAUDIUS DENOYEL, 1920. Flowers glistening crimson-red, tinted vermillion, of enormous size and sweetly perfumed. Growth very vigorous.

MME. JULES GRAVEREAUX, 1901. Flesh-pink flowers with cream and yellow suffusion. Well formed and fragrant. Vigorous climbing plant. Foliage extra fine.

SPECIES ROSES

No Rose Garden is complete without at least a few of the wild species roses as they came from the hand of Mother Nature. It is indeed remarkable how little is known about them, and yet, at least seventeen of them, they are the very ancestors of our modern garden roses, no matter of what type they are. And some of them are very beautiful in their natural state, ornamental in a high degree.

Most of the wild roses make an excellent showing in a broad garden treatment, in the shrubbery and for landscape effects. They need very little care and pruning, except to keep them in a shapely form and within bounds.

We have selected those which are known of making a splendid display. Some of them have the added charm of richly colored seed hips in great abundance all winter.

All varieties are budded plants, their price being 75 cents each, \$6.00 for 10, unless otherwise noted. But we want to emphasize it most distinctly, on a large enough order, amounting to \$20.00 cash sent, we will allow 35% discount, and on a cash \$50.00 order, 50%, meaning that the purchaser can select either 35% or 50% more plants from the list.

In addition to this unusual discount we will add three plants extra to cover fully the express charges to any place in the country.

N. B. Kindly send in your order without any delay as the supply is very small.

R. ROSA ACICULARIS, Lindley. Dark rose-pink. Blooms in May and June. Very hardy.

R. ARVENSIS, Hudson, Europe. A trailing shrub with rather large foliage. White.

R. ALBERTI, Regel (Turkestan). Single white flowers. Finely divided foliage.

R. FOEDIDA, Austrian Copper. Inside copper red, reverse golden yellow.

R. BELLA, Rehder-Wilson. Bright pink, solitary flowers. Beautiful foliage.

R. BLANDA, Aiton, (Northwestern North America). Soft pink flowers. Hardy. 60c.

R. CANINA, Linnaeus, (Europe). This is the ancient Dog Rose. 60c.

R. CAROLINA, Linnaeus, (Eastern North America). A very vigorous shrub. 60c.

R. CORIFOLIA, Fries, (Europe and Western Asia). Light pink flowers. Tall.

R. DAMASCENA, Miller, (Asia). Double, rose pink blooms of great fragrance.

R. DAVIDII, Crepin, (Western China). Flowers pink, borne in clusters. Tall.

R. ECAE, Aitchison, (Turkestan). Pale, yellow flowers. Dark green foliage.

R. CAUDATA, Baker, (Western China). A prickly shrub with red flowers.

R. FOLIOLOSA, (Eastern North America). A shrub with excellent foliage

R. GALLICA, Linnaeus, (Europe). The parent of many of the older French roses.

R. GALLICA CONDITORIUM, Diek. (Western Asia). The rose of utmost fragrance.

R. GALLICA SPLENDENS. Somewhat taller than the type, and large flowers.

R. GENTILLIANA, Leveille, (Central China). A semi-climbing shrub. White.

R. GIGANTEA, Collett, (Burma, India). The largest growing rose. Giant in growth and flowers, but tender. Foliage is mildew immune, glossy. \$1.50.

R. GYMNOCARPA, Nuttal, (North Pacific Coast). Growth slender but tall.

R. HELENAE, Rehder & Wilson, (Central China). Almost climbing habit to 15 feet.

R. HIBERNICA, Gravesi. This is one of the most desirable forms. Very hardy.

R. HUMILIS, Marsh, (Eastern United States). Clear pink. Very showy. 60c.

R. HUGONIS, Hemsley, (Western China). Light yellow flowers in grand abundance.

R. L'HERITIERANA, Thory, (Asia). A vigorous, almost thornless, purple.

R. LUCIDA, Ehrhrt, (Northeastern North America). Bright pink flowers. Attractive in winter because of its reddish stems and scarlet fruit. 60c.

R. MACRANTHA, Deportes, (Southern France). Light pink flowers three inches across.

R. MICROPHYLLA, Ruxburg, (Western China). The smallest leaved rose, with large hispid seed hips. Flower is very large and flesh-pink.

R. MOSCHATA ALBA, Graebner, (Himalaya). A semi-climbing shrub of great beauty.

R. MOYESII, Hemsley and Wilson, (Western China). Deep blood red flowers. No other wild rose has stirred the imagination of rose-breeders so much as this. Beautiful foliage and strong growth. Extremely showy.

R. MULTIFLORA, Thunberg, (Japan and Korea). Small white flowers in abundance.

R. MULTIFLORA CATHHAYENSIS, Rehder and Wilson. Growth more slender.

R. MULTIFLORA PLATYPHYLLA, Thory, Seven Sisters Rose. Ancestor of Crimson Rambler. Flowers are fairly large and double, and borne in large clusters.

R. MORICA. A hybrid of R. Canina, possibly with R. Spinosissima. Very hardy.

R. MULTIBRACTEATA, Hemsley & Wilson, (Western China). Growth strong, but slender. Attractive, almost fern-like foliage, and very graceful habit.

R. OMEIENSIS ptr., Rehder and Wilson, (Western China). With immense ornamental thorns whose broad, winglike bases almost join along the branches, making a striking and unique effect. Having only four white flower petals.

R. PALUSTRIS, March, (Eastern and Southern United States). Attaining 8 feet. A native of swampy and wet ground. Bright pink flowers in corymbs.

R. PISOCARPI, Gray, (British Columbia to Oregon). Blooming for several months in corymbs of bright pink. Almost free of prickles.

R. PENDULINA PUBESCENS, (Central and Southern Europe). An Alpine species with usually thornless canes. One of the best. Bright red flowers.

R. RUBRIFOLIA, Villars, (Central and Southern Europe). A 6-foot high shrub with bluish foliage darkly tinged with crimson. Intensely pink, starry flowers.

R. SATURATA, Baker, (Central China). Dark red flowers. 8 feet high shrub.

R. SETIPODA, Hemsley & Wilson, (Central China). Clusters of large pink flowers borne by a 10 feet high shrub, followed by drooping clusters of large fruits.

R. SOULIEANA, Crepin, (Western China). White flowers borne in clusters by a 12 feet high climbing shrub. A most beautiful and profuse bloomer.

R. SPINOSISSIMA ALTAICA, Rehder, (Siberia). Very attractive in the shrubbery border. The flowers are large and white. Foliage is very fine.

R. SPINOSISSIMA FULGENS. A horticultural variety with semi-double flowers of lilac-pink. The plant is dwarf with fine, fern-like foliage.

R. SWEGINZOWI, Koehne, (Western China). Pink flowers in small clusters followed by attractive fruits. Slender, small leaved shrub.

R. POMIFERA, Hermann, (Europe and Western Asia). Small clusters of pink flowers on a densely branched shrub 6 feet high, followed by large fruits like small apples, very good for preserves.

R. WEBBIANA, Wallich, (Himalaya to Afghanistan and Turkestan). Large pink flowers and ovoid fruits. Foliage distinct, round or oblong leaflets.

R. WICHURIANA, Crepin, (Japan). Pure white flowers in large clusters. Plant is trailing and forms a dense mat of shining, almost evergreen foliage.

R. WILLMOTTIAE, Hemsley, (Western China). Purple-rose flowers, followed by bright red fruits. Foliage finely divided and very handsome. Very distinct.

R. XANTHINA, Lindley, (North China and Korea). Bright yellow double flowers. More vigorous than Hugonis, and with better foliage and longer lasting flowers.

R. XANTHINA NORMALIS, Rehder & Wilson. The true wild form of Rosa Xanthina.

R. XANTHINA, Allard. Similar to R. Xanthina, but growth medium with fern-like foliage. It is one of the finest yellow shrub roses. Very decorative.

RUGOSA ROSES

Rugosea Roses are particularly valuable for their hardiness, healthiness and ability to thrive under most adverse conditions of climate and soil. It is to be greatly deplored that the rose loving public does not avail itself to these robust representatives of the Genus Rosa.

The price for them is the same as the preceding, allowing on them also the same liberal discounts.

ROSE A PERFUM DE L'HAY, (Gravereaux, 1903). Double, dark crimson flowers, intensely fragrant. Hardy in severest climates.

TUERKE'S RUGOSA SAEMLING, (Tuerke, 1923). Orange-yellow in bud, opening to salmon pink color with appealing fragrance. A fine novelty. \$1.00.

MOSS ROSES

Moss Roses should still find an honor place in our rose gardens. Bearing a crown of lacy moss upon the stems and sepals they are indeed exquisitely lovely in bud. Absolutely hardy anywhere.

Price and sales condition the same as for the rest, \$1.00 each, \$9.00 per dozen, but allowing the large discounts.

CRISTATA, or CRESTED MOSS, (Chapeau de Napoleon). Triangular buds, enclosed by smooth sepals, crested with a deep frill or fringe which sometimes extends to the leaves. The flowers are large and full, bright rose-pink, Unique.

MUSCOSA JAPONICA. Dark pink, semi-double, heavily mossed. Will stand any climate unprotected. Makes an excellent shrub.

PROVINS—OR GALIC ROSES

These were the greatly favored Roses at the beginning of the 19th century, especially most beloved by the unfortunate Empress Josephine, and cultivated by her at her beautiful gardens of La Malmaison. There were hundreds of varieties. On account of their fragrance and extreme hardiness the Padre uses them in his hybridization work with Rosa Gigantea, both as seed and pollen parent, in order to get an entirely new type of roses, not only hardy, but also of exquisite foliage, fully mildew immune, and fine fragrance of flowers.

Price the same as the rest, with discount.

On account of limited space we list here only two, although we have a good collection of them. If interested, let us know.

BELLE DORIA. Beautifully built flower of curious violet slate color. Very hardy.

FORNARINA, (Vetillard, 1826). Pretty rose-red. Very large foliage. Spicy fragrance. An upright grower.

SOMETHING ABOUT THE PADRE'S OWN PRODUCTIONS

Why still more new roses, and make the selection of varieties a still more complicated job? This is the verdict of many puzzled rose amateurs, and also of professional rose growers. Alas, the breeding of new roses is of absolute necessity and the most essential work for the further development of roses. Without the skillful and ingenious labor of many rose experts, especially in France, England and Germany, not to speak at all of several successful men in this country, we surely would not have today those marvelous new Pernetiana Roses, so gorgeously colored as never dreamed of before to be possible with roses. And the color chart is not exhausted yet.

But how does it come that some of the most beautiful new roses imported from Europe, and such a great success over there, fail so utterly here? There is certainly no other explanation possible than that our climatic conditions are so vastly different over a vast complex of land, North and South, East and West. Why then should we rely almost exclusively on European bred roses, the more so if God gave us the same opportunities and brains to do what can be done in Europe, but with full consideration of our local and provincial needs? It is this desire that animated the Padre to do his share, if possible, to contribute to the American Rose growing in Southern California so favorable with the most balmy climate to carry on such experiments. It is his earnest endeavor: "A rose for every home. A bush for every garden." This naturally means first of all a rose for the amateur to do well under ordinary care, that is without the skill of the professional gardener, or in the hot house. The foliage of such roses must be more disease resistant, more free from mildew, the whole plant more hardy, with ideal long stems, and the flowers must be of perfect shape, and must be fragrant.

To obtain this ideal, it seems that the crossing and re-crossing only of already existent pedigreed varieties, no matter how grand and perfect in shape, is not alone sufficient for real development and local needs. To get, in the first place, more vigor, more healthy constitution, more hardiness into our coming roses for one and all states of the whole Union, the many grand untried species, found from Alaska to India and Siberia, seem to be the surest and only basis for a judicious plant development, especially to come, once and for all, away from the everlasting and unavoidable inbreeding, if only the present pedigreed varieties are crossed and re-crossed. The natural habitat of some of these species, as for instance, Rosa Acicularis of Alaska and Rosa Acicularis Baicalensis of Siberia, are alone sufficient proof that roses for even the coldest states are well within reach as soon as developed into suitable garden varieties. If Rosa Gigantea seedlings or hybrids, their ancestor coming from tropical India, will not do for the state of Dakota, the off-springs of Rosa Acicularis, coming from Alaska and Siberia, as we see, will surely stand the severest cold below zero. In fact the Padre has already the superb new rose, Dakota, a seedling of Acicularis X Conrad F. Meyer X The Lyon Rose, and hence the blood of three distinct very hardy races in its veins, namely, Acicularis, Rugosa and Pernetiana. To indicate its hardiness it was named Dakota.

Every year from thousands of seedlings a few are selected as meeting the requirements of the ideals of a perfect rose. But for five generations no seedling is thrown away, but kept and watched in order to study in every minute detail the heredity of characters, dominant and recessive, and thereby valuable knowledge for future experiments is gained. As a sample we mention again the well known Pernetianas so gay and beautifully colored, but their greatest drawback is the dying back of the wood, black spot and early fall of the foliage, and in general weak constitution of growth. But who cannot see and understand that crossed with Rosa Gigantea and Dakota, the fine Acicularis and Rugosa Hybrid, an entirely new and healthy type of roses will be developed? Supposed the first generation still shows some undesirable characteristics, we can at least console ourselves that we are on the right track, truly now able to remedy the faults and getting in the second generation hybrids much nearer already to our goal. And there are yet hundreds of Hybrid Teas, Hybrid Perpetuals, Noisettes, Wichurianas, Bourbons, etc. of special merit we can fall back on as suitable breeding material until we just get what we want.

Of special merit. Out of the many thousands of seedlings so far produced and tested as most outstanding will be found the fine Santa Barbara Queen, seedling of Lady Greenall X Rosa Gigantea, of the most exquisite salmon yellow, extra large, long pointed bud, rich delicious fragrance, but above all of the finest clean foliage, glossy green and free from mildew. And there are other very good ones coming on: Alessandro, Senora, Majella, Cabrillo, Hermosissima, Rosa Mystica, Rev. Thomas Stecher, Rev. J. B. Wand, Mrs. George R. Fearing, Golden West, Milpas, Charmer, Chemeketa, Chemawa, Brilliance, Anna, The Padre's Triumph, Juliet Seedling, Grandeza, Senora Moreno, Temecula, Valerio, etc. It may be noticed that a

trial is made with names of local history to acquaint people with the lure of Santa Barbara and Southern California.

With such seedlings on hand for the next few years, the best results are yet to come, judging from the exceptionally fine growth and healthy foliage of some of these species hybrids of practically all the seedlings of 1929 and 30. Such colors as Mari Dot, Charles P. Kilham, Doris Dickson, Shot Silk and Angel Pernet are exactly duplicated in dozens of new comers. This fact is mentioned to inspire everybody with interest and enthusiasm in rose culture from ocean to ocean.

Let us understand once this: if we encourage rose culture in our country, we are encouraging at the same time the highest aims of civilization, home loving and an appreciation of beauty. Therefore, dear fellow members, let us help together, each one in his ability towards a noble end.

As it would be unfair to list certain varieties which will be introduced by some leading commercial growers, we will list here only those already on the market. While the usual introduction price is \$2.50, the Padre wants to give a special proof of his earnestness to help a good thing along, making it possible for everybody by making a special allowance of only \$2.00, and besides this on a \$20.00 cash order to grant yet a fifty percent discount, provided order is sent in at once.

THE PADRE'S OWN VARIETIES

ARRELLAGA, HP. Large glowing pink buds and gigantic flowers of vivid pink with a light golden glow. Very fragrant and lasting. Long stems, and the plant blooms with great abundance. Foliage very handsome and healthy. Partly of Rosa Gigantea. \$2.00.

PITTSBURGH, HP. Very large buds and blooms of light flesh-pink, with a yellow base, globular form, and slightly fragrant. Strong growth. Large, healthy foliage. Partly of Rosa Gigantea, Frau Karl Druski and Mrs. John Laing, \$2.00.

SCHOENER'S NUTKANA, NH. Although only a single flower, but very large. This is the first of an entirely new race of roses of American origin from an American species, Rosa Nutkana of Oregon. No other Rose produces such a glorious abundance of clear rose-pink flowers. Foliage is abundant and has the leathery texture of Paul Neyron. No rose garden should be without it. \$2.00.

CHARMER, HT. This rose is perfection of shape. Translucent flesh colored, very large double flowers borne on extremely long stems. Never out of bloom from early spring until late in October. A great acquisition. \$2.00.

GOLDEN WEST, GH. This is a seedling between Frau Karl Druski and Rosa Gigantea. In its growth and wood it resembles very strongly Frau Karl Druski, but the foliage has the outlines of Rosa Gigantea. The flower is extremely large, and of an entirely new color very hard to describe, looking like mother of pearl with pink and yellow shining through the petals at the same time. An incessant bloomer and very strong, healthy grower, but not free from mildew. \$2.00.

DELICATA, AH. Hybrid between Rosa Abesynica X Clb. Cecil Brunner. Coming in gigantic clusters of lovely shaped small flowers very similar to Cecile Brunner. This also is an entirely new type of roses, very healthy and most showy, but needs lots of room. Fully mildew and black spot immune. \$2.00.

CALPURNEA, G.H. Another Gigantea Hybrid of great merit. It is a semi-climber of fine habit, although not entirely free from mildew. The flowers are large, very double of a pleasing carmine-flesh color with a strong fragrance. \$2.00.

MME. HERRIOT X GIGANTEA, GH. This is a most interesting hybrid of extremely climbing habit with flowers very similar to Mme. Herriot. \$2.00.

JULIET HYBRID. AH. A most outstanding novelty of extremely large flowers. The plant reminds one of Juliet, but the flowers are first of a coppery yellow in bud, and when open having a beautiful lavender overcast. Mildews. It is a very strong grower, and in bloom most spectacular. \$2.00.

SANTA BARBARA QUEEN, G. H. A dwarf Gigantea Hybrid. It is of the most delicious fragrance, similar in color to its seed parent, Ophelia. Very strong growth, and a persistent bloomer.

THE PADRE'S TRIUMPH, GH. A most unique combination between Beauty of Lyons and Rosa Gigantea. The foliage has the spicy scent like ripe apples. The flower is of the most perfect shape and in color similar to William Allen Richardson. Unhappily it carries with it somewhat the troubles of the Pernetianas, subject to black spot. But its growth is most healthy and the foliage in its first stages very luxuriant and beautiful. It is indeed a new type. \$2.00.

GIGANTEA HYBRID. This is a seedling from self fertilization of Rosa Gigantea. But the foliage is somewhat different, more pointy and more glossy. The flowers are very large, and with the fine foliage this is by far a better rose than the well known Cherokee Rose. It is an exceedingly strong growing plant. \$2.00.

N.B. Kindly consider the extra discounts allowed, and the great purpose of the sale of these roses, namely to get the further financial means to carry on the great work of Rose Breeding in this country. Somebody must do it. To make the extra offer worth while, it stands to reason that the order must be at least somewhat larger. The purchaser is privileged to select from 35 to 50% more roses according the cash order.

N. B.—Kindly do not fail to read the thesis on "Dahlia Breeding," "Something About the Padre's Own Productions," and the "Appeal for a National Rose Garden."

**AN EARNEST PLEA FOR A WORTHY CAUSE
KINDLY DO NOT FAIL TO READ THIS CAREFULLY
A BOTANIC-GENETIC ROSE GARDEN FOR AMERICA**

The Padre feels that his task in the encouragement of planting more Roses would only be half done, if he would fail to point out the great good that can be accomplished in a community through public or municipal Rose Gardens, and in addition to them through a thoroughly comprehensive National Rose Garden, where a judicious rose-breeding and rose-selection for every state in the Union is carried on.

What the Padre, then, means, is a coordination or well planned system of ROSE CULTURE in this country through Municipal Rose Gardens in every city and town, working in harmony with a general clearing house of Roses, a National Botanic-Genetic Rose Garden preferably in the state of California, for the reason as the most tender, as well as the most hardy species and varieties can be successfully grown alongside of each other in the open ground from January to December, and hence enabling a person to see at a glance what is really worth while having for the ambitious rose amateur, and also indulge in a well planned scientific system of rose breeding, seeing that new and novel combinations are possible, and through such combinations evolve entirely new races of Roses, not only more hardy through the influence of our own hardy native species, but also more disease resistant new types through disease immune species, such as Rosa Gigantea, Rosa Macrocarpa, Rosa Leschenaultina, Rosa Lucidissima and others not tried out so far at all. But only under the most congenial climatic conditions is it possible to carry on such an exhaustive and ambitious program of Rose breeding. And for this reason the Padre gives his preference to the Golden State of California.

No doubt the members of the American Rose Society read with interest the splendid article in the 1931 Rose Annual of Dr. William Crocker, Director of the Boyce Thompson Institute for Plant Research, Yonkers, N. Y., pleading for a Rose Foundation "to further the study of rose problems." And as he correctly puts it: "In this study of roses would first be included, 'properly directed research' of untried wild species from the world over, as 'there is a great need of coordinating, amplifying and rendering more effective the work being done by breeders and other workers of roses.'" If we want to make at last real progress of self production of new roses, surely some day a start has to be made with systematic rose breeding. Therefore, if the collection of varieties and species is not sufficient, it will be from the outset impossible to make enough and the right kind of combinations. And it is the right combinations of outstanding good qualities contained yet in many wild species, especially hardiness, and above all immunity of diseases, such as mildew and black spot. For this reason very aptly Dr. Crocker says: "What we need is highly effective breeding to bring forth these good characters."

Of the 1929 seedlings, germinated from the 1929 seed, up to January 1st, 1931, out of 49,364 seeds 15,847 germinated. And of these seedlings Dr. Crocker states in a letter of April 2nd, 1931, as follows: "I feel when you get some of these hybrids that have already been produced by your crossings, you will have greenhouse roses that are so much better than any of those now grown that there will be no comparison. I have been especially struck by the

long conical buds that appear on many of these and the wonderful colorings and texture of the petals. This is brought out in the paintings of some of these seedlings, but it is almost impossible in paintings to show the marvelous tints and the remarkable texture. Also some of the foliage is wonderful." Now it must be well understood that the second generation of these seedlings will be still better, bringing out still more the very refined characters of *Rosa Gigantea* and *Rosa Macrocarpa*.

For a better understanding of Dr. Crocker's statement just made, I may yet add that nearly two thirds of these seedlings show *Rosa Gigantea* influence in foliage, vigorous constitution and shape of buds. Instead of the strong climbing habit of the original wild species a good percentage of them are only strong and upright growers of from four to six feet high. But the main achievement is that they are mildew immune in the same degree as the species *Rosa Gigantea* Collett,—not *Gigantea odorata* Rehder & Wilson,—and *Rosa Macrocarpa* Watt, *Rosa Bracteata* and *Rosa Laevigata* are.. It is a wrong impression and misleading statement that *Rosa odorata* *Gigantea* Rehder & Wilson is the species from which certain *Gigantea* Hybrids originated. Including yet *Rosa Nutkana* these are the principal species with which the Padre is carrying on his rose breeding experiments. In order to get the much admired colors of the *Pernetiana* type in this new race of roses, to a great extent the pollen of the high colored *Pernetianas* is used, as for instance the pollen of Madam Ed Herriot, Mari Dot, Charles P. Kilham, Cuba, Mrs. Sam McGredy, Wilhem Kordes, Queen Alexandra, Rev. Page F. Roberts, Mevrow van G. A. Rossem, Talisman, Dame Edith Helen and many others.

To give some idea of the enormous work carried on by one old man, 70 years of age, practically without means, and so far only with the generous help of Dr. William Crocker to germinate the seed and keeping the seedlings until they are large enough to be transported that in 1930 376 different combinations were made, all different from those made in 1929, and from Yonkers on the Atlantic Coast to Santa Barbara on the Pacific Coast, I am proud to say this year, 1931, the work was pushed ahead still further with 412 more combinations. At such a rate of exhaustive research and testing out any possible combinations between promising wild untried species and the most gorgeously colored varieties we have so far, who can and will longer deny that we are on the sure road for entirely new types and races of Roses? The combination of highly colored *Pernetianas* with *Rosa Gigantea*—and *Macrocarpa* Hybrids had the startling effect of refining these marvelous tints still more, plus a refined, long tapered bud.

As to the doubted hardiness of these *Gigantea* and *Macrocarpa* Hybrids, and also *Nutkana* Hybrids, I can state already with firm confidence that they will be just as hardy as any *Pernetiana* and Hybrid Teas, for it is an absolutely established genetic and biological fact that the tenderness of *Gigantea* and *Macrocarpa* is halved in their hybrids through *Pernetiana* and Hybrid Perpetual and *Rugosa* influence, either as seed—or pollen parent. The inheritance of the *Pernetiana* colors is unmistakable proof that the original *Gigantea* characters are mitigated, at least half way, by the other types, in our experiment even with *Wichuriana* and *Burbon* roses. So much already can surely be seen that the beaten track of mere crossing of existing varieties is no longer the case in this exhaustive genetic rose-research.

Alas, in spite of such outstanding and most promising success, the hoped for help and encouragement from the rose loving public so far yet nowhere showed up, making now the continuation of this work very doubtful. Could there be really a more worthy cause in rose lore of our great country than to encourage scientifically carried on rose breeding through the influence of entirely new blood of so far untried wild rose species, including several fine American rose species, such as R. Blanda, R. Nutkana, R. Stellata and R. Lucida?

That my dream of a botanic-genetic Rose Garden will yet be realized before I die, I offered the American Rose Society, as a nucleus of the first planting material, all seedlings so far raised and collection of species. And hereby I go now still a step further: To enable me to carry on this noble work of rose breeding, to get the sufficient finances together for another year, I offer to every member of the American Rose Society at HALF PRICE three year old specimen plants of the latest and tested out varieties, if a cash order amounts to at least \$20.00, that is for \$20.00 half price rose plants, including a few of my own new varieties, such as Arrellaga, Pittsburgh, Schoener's Nutkana, Charmer, Chemawa, Golden West, Delicata, The Padre's Triumph, etc.

To make at once room for 10,000 new seedlings, germinated most generously by Dr. William Crocker at the Boyce Thompson Institute, Yonkers, N. Y., I am compelled to dispose of my finest stock, all budded or grafted, and extra large specimen plants. May I therefore, not ask every member of the American Rose Society to help a good thing along?

It is certainly here not a money making rose-scheme, but a genuine love for the "Queen of Flowers," to improve it, if improvement is yet possible, and to give our Rose loving amateurs more reliable varieties of better constitution and entirely new types of Roses.

Dear Rose friends, May I hope that my appeal will not altogether be in vain, but that all will send in a trial order and be convinced that united efforts also in rose culture will bring better results all around? Most naturally the supply is a very limited one, only in all 10,000 large size plants, and 5000 two year old ones, the average market grade.

As the three year specimen plants are considerably larger than the usual 2 year market size, the packages will be larger. To compensate for extra Express charges, extra plants will be added gratis to make a purchase of plants still more worth while.

In addition to this offer I propose to allow the members of the American Rose Society half price on all new varieties selected from the new seedlings as soon as they are propagated in sufficient quantities, which will take yet a year or two.

Yours for a National Rose Garden, thoroughly fitted up for scientific Rose Breeding,

THE PADRE
Rev. Geo. M. A. Schoener.



Gold Medal for 46 New Tent Roses produced by the Padre, exhibited at the Santa Barbara Horticultural Spring Flower Show, April 22nd, 1920.



Medal of Honor, award bestowed on the Padre's New Roses at the World's Fair, 1915, San Francisco, California.

Besides these medals, certificates of merit for New Dahlias, Santa Barbara Horticultural Society, Fall Show, Oct. 21st, 1919, and also from the Storrs, Com. Official Trial Grounds.

Testimonials of highly pleased customers are numerous, from the world over, including China, Japan, Argentina, South America, Australia, and countries of Europe.

DAHLIA SEED

Specially written by Rev. Geo. Schoener, for the purpose of encouraging *Dahlia Raising* on a surer basis of breeding than it has been done heretofore, hit or miss. Wide awake Dahlia enthusiasts ought to encourage such work, at least by a trial order for seed. *Read it.*

It can be fairly well assumed that every Dahlia enthusiast knows that new Dahlias originate from the seed. And there is hardly a more fascinating occupation for the true plant lover than to try his luck with seed to raise new and probably better varieties, because every Dahlia plant from seed is an entirely new variety which may be better than any variety now on the market and the flower it was taken from. But it may also be entirely worthless to propagate it further, to name it and put it on the market. And sure it is, in nine cases out of ten the raising of Dahlias from seed, promiscuously collected and no such thing done as to hybridize outstanding varieties with pollen from other outstanding varieties, there are more disappointments and total failures than occasional success, simply because the trend of nature is that seedlings from such seed revert back nearly fifty percent to the original single wild species of the Dahlia, especially when the seed happens to be knowingly from already half single Peony Dahlias. The cases where the bees just hit it to effect with their pollen carrying from a nearby fine variety the right kind of a combination of two great varieties together to produce a desired improvement towards further perfection of the Dahlia are indeed very rare as the history of the Dahlia most clearly shows. An outstanding great new Dahlia can hardly be expected with certainty from such seed promiscuously collected from varieties that go the easiest to seed. At any rate, an outstanding great new Dahlia is not born every year, even with the best precaution, as we never have nature under such control to produce for us always exactly what we want her to do. At its best we can reasonably help along according to certain principles of heredity, and according to acquired knowledge through a series of many failures.

At this time of advanced genetic sciences, or scientific plant breeding, it ought to stand convincingly to reason for the most exact Dahlia lover, that Dahlias make no exception whatever, but are equally controlled in their perpetuation by the hereditary laws of nature, and hence that these laws can safely and with accuracy be applied to Dahlia breeding. And as this is an undeniable scientific fact, there is surely a vast difference between promiscuously collected seed, even from the best varieties, and carefully hybridized seed, the two parents known, that is a certain variety selected as seed parent, and another outstanding one as pollen parent, in an effort to combine both into one with a definite object in mind for a further improvement over both parents. This then is no longer hit or miss seed collection, but Dahlia breeding on a scientific basis, namely according Mendel's Principles of Heredity.

In regard to Mendel's Principles of Heredity in Plant Life, applied by the Padre in Dahlia breeding, a celebrated English authority on this subject, Dr. S. Herbert, in his excellent work, "The First Principles of Heredity," says: "He, the plant breeder, can now, by judicious crossing, produce new strains—not blindly, as before, but with an exact knowledge of what he wants and what he can achieve." "Man is now able to unite given desirable qualities in favorable combinations. More than that, undesirable characters can be bred out, once and for all, by rejecting those individuals which have the undesirable combinations, without fear of losing the desirable qualities, for the breeder can, in a Mendelian case, ascertain with absolute certainty the underlying constitution of each given individual."

With due consideration of these fundamental facts it must stand to reason, even to the most sceptic advocate of the theory that the bees are the most efficient hybridizers of Dahlias, or that artificial cross pollination by hand is impossible in Dahlias, must admit that there is a great difference in seed,—success or failure all depend on the right kind of seed. We readily grant that all thoughtful Dahlia raisers take at least the precaution to collect seed only from the very best varieties, of course hoping to get still better ones from the seed of them, new colors and better stems, always supposing that the bees were at work to do efficient hybridization. It is however, the well founded opinion of the Padre that what the bees can do, we can also do with a little extra exertion and with some forethought why we do it. A mathematical formula says: If we know two points, we can find through them the location of the third point in a straight line or a circle. And in careful line-breeding of Roses and Dahlias, this formula works out equally well. If we know the outstanding merits of a certain Dahlia, and select it on this account as the seed parent, and then go and select another fine Dahlia of which we are sure beforehand it will make a good combination with the other, to take the pollen from it for cross-pollinating the seed-parent, who will deny that seed raised with such precaution and premeditation of the resultant seedlings is not infinitely better than seed merely collected because it is Dahlia seed, even from the best varieties. We are at once sure of a careful line-breeding, and know the pedigree, and

exactly know by looking at the resultant seedlings what characteristics were transmitted to them, or what characteristics acted dominant and which ones recessive, surely a most valuable knowledge for further breeding experiments, being on the right track to guide intelligently all future work towards further development, without just making a shot in the dark.

To be of real help in the successful raising of Dahlia seedlings, it would rather be necessary to furnish our customers with the right kind of information about the complicated questions of plant genetics with special reference to Dahlias, how the act of artificial hybridization, or how the right kind of seed is raised, and where it is possible to raise it. The best that can be done for the present is to refer all interested parties to a comprehensive article on Dahlia hybridization, written by the writer of this catalogue, the Padre, and which appeared in the Bulletin of the American Dahlia Society, October 1927, January and April, 1928.

While it is impossible in the narrow space of this brief price list to present an exhaustive discussion, scientific and practical, of the botanic and genetic facts of Dahlia hybridization, or how to go about to raise more reliable Dahlia seed, no matter how important this knowledge is, we will at least hint at some salient points in order to put our customers on the right road for further investigation on their own accord, to make them sufficiently interested to solve their problems with reference to local conditions. At the same time such far reaching explanations of such a vital question in Dahlia raising will serve as the most reliable assurance our customers can depend on the seed offered in this price list that every possible care was taken and hybridization skill was exercised to produce on purpose pedigree seed, and not merely collect the ripe seed which is casually found after the plants had died down.

The best way to accomplish our aim of initiating our customers in the workings of Dahlia hybridization and its irrevocable necessity to practice it, if more reliable seed is wanted to eliminate gradually by the increasing of inferior varieties, it seems we could not do better than to present a fair illustration of two unquestionably great varieties bred together. For a concrete example let us pick out Jane Cowl as seed parent, and for its hybridization pollen to be taken from Mariposa. Of the many Honor Roll Dahlia varieties of 1927, mentioned in the Garden and Home Builder by Darrill W. Hart, Jane Cowl is by far the best of all. It combines every characteristic of a perfect Dahlia,—perfectly stiff and stout stem, flower facing upward, perfect shape, large size, good substance of petals indicating good keeping quality in the cut state, and most attractive color. Who would dare to deny that well ripe seed from such a Dahlia would not be about the most desirable, not only for the professional Dahlia grower, but for the amateur as well? But anybody knowing something more definite about plant breeding and reliable flower seed capable to produce still better things as the seed parent is itself, knows well enough that it is not Jane Cowl alone, and cannot be Jane Cowl alone to produce something still better than she herself is without pollen from an equally good Dahlia. While it is an acknowledged fact that in genetic research work of plant breeding that it is usually the good physical constitution of the seed parent, or mother plant, from which the resultant seedling takes directly its new physical constitution of healthy growth and characteristics of size and shape of flower, stiffness of stem and kind of foliage, it is equally certain that all further improvements in color, variation of shape, especially between decorative and cactus varieties, fullness and perfection of shape, comes to the greatest extent from the influence of the pollen parent, or father plant, that is to say the influence of the pollen on the germ of the seed bearing variety or mother plant.

To translate these genetic facts over into our example of Jane Cowl being the seed bearing parent, that is to be hybridized, and the pollen to hybridize with to be taken from Mariposa, a hybrid cactus variety, we may assume that at least a good percentage of one third of the resultant seedlings will show the outstanding characteristics of their mother, Jane Cowl, that is, the flower again facing upward, stiff stems, upright symmetrical growth, large size of flower and good foliage. Mariposa, being justly considered as one of the most perfect hybrid cactus Dahlias in existence, with pleasing color of orchid pink, with excellent shape of flower and erect, stout stems, will show its influence on the resultant seedlings in a different color scheme from that of Jane Cowl, that is in a mixture, probably with a delicate overcast of orchid pink over the bronzy buff and gold of Jane Cowl, enriching yet the beauty of the original color in a marked degree, and by no means undoing it, as what is in the color of Jane Cowl will and must show up again in its profusion with the colors of the pollen parent either as ground color, or defused.

So much ought to stand to reason to a clear thinking Dahlia enthusiast, anxious to raise Dahlias from seed, that nothing of the good characteristics of Jane Cowl will be lost, or fall into the ocean, if hybridized with pollen from Mariposa. And vice versa, nothing of the good qualities of Mariposa will be lost either. But, on the contrary, there is a very reasonable expectation that a happy blending of the good characteristics of Jane Cowl and Mariposa will take

place, at least in about 25 percent, in the resultant seedlings, some of them leaning more to Jane Cowl, while some show very plainly the hybrid cactus influence of Mariposa, including in subdued shade the orchid pink in an interesting suffusion with the beautiful color of Jane Cowl as already indicated.

Before going further we must here admit that our task of hybridization would be a comparatively easy one, if we would have only to reckon with Jane Cowl and Mariposa, assuming that they are pure bred. Alas, our present day Dahlia is no longer a pure bred wild species, coming true from seed. It cannot be denied that atavism, or the reverting back to many past inferior generations of grand and great grand parents, will show itself in about 50 percent of the resultant seedlings. But having to reckon with atavism in practically every hybridization experiment until we have come to a pure bred type, it must be well remembered in Dahlia breeding, collecting seed from plants which were not hybridized, that atavism will show up still worse, as hybridization has at least the direct effect that the pollen from a good variety will exert its influence on the resultant seedlings, preventing the full play of atavism. It is therefore a very wrong conception of affairs to think that all that is needed is to collect seed from an acknowledged fine variety. Here is where we find the cause that not more seed is producing new record breaking Dahlias, and why always more inferior Dahlias are spoiling the fun for the eager Dahlia enthusiast, thinking he can break it over his knee to get what expected to get.

Following, therefore, exact principles of scientific breeding of mathematical correctness, it is for the Padre no longer a shot in the dark, but a positive and careful line-breeding, knowing the pedigree of the seed produced. In the first place only Record Dahlias, of the Honor Roll, are selected as breeding material. For instance such varieties as Jane Cowl, Eagle Rock Beauty, My Maryland, Mrs. A. L. Seal, etc.

Anybody, offering Dahlia Seed without the definite pedigree of the two parents, and claiming reliable results from it, going so far as stating that the bees are doing their hybridization work, is deliberately misleading the Dahlia loving public. Who will deny that seed raised with precaution of the right selection of seed—and pollen parent, and consequently with a premeditation of the resultant seedlings, is not infinitely better than seed promiscuously collected; merely it is Dahlia seed, and perchance bees visited the flowers? No matter if such seed is even collected from the best varieties, the raiser is in no position to give a full pedigree.

It seemed not more than fair for the protection of the genuine Dahlia enthusiast to give the right understanding about the difference of seed. And by careful comparison it will be seen that our seed is not even dearer. But for those who do not care for the hand hybridized seed we have the cheaper seed, exactly as our competitive seed raisers at \$2.50 per 50 seeds, and \$4.00 per 100 seeds.

Make a trial and be convinced.

PRICE OF PEDIGREED DAHLIA SEED

The price of our seed of which both parents are known, hybridized carefully with the aid of a microscope, is only \$10.00 per 100; \$6.00 for 50 seeds, and hence even cheaper than their seed for \$25.00.

If some customers are satisfied with cheaper seed and insist on it, we have collected, just as other raisers do, seed from the best double decorative varieties, such as Amun Ra, Jersey's Beauty, Mrs. I. de Ver Warner, Eldorado, Meadow Lark, Campagne, Ellinor Vendever, Treasure, King Tut, Black Jack and others; and from such Cactus and Hybrid Cactus varieties as McGregor, Mrs. Edna Spences, El Granada, George Walters, Esperanza, Amethyst, Daddy Butler, Mrs. Warnaar and many others. Price \$3.00 per 50 seeds; \$5.00 per 100 seeds.

Here is a list of varieties on which pollen from *Jane Cowl* was used, and from which seed may be had, their pedigree then as follows: Barbara Redfern, Eldorado, The McGregor, City of Trenton, Berengaria, Beau Ideal, Garden Joy, Amun Ra, Sagamore, Mrs. Ida de Ver Warner, Elite Glory, Jersey's Beauty, Mrs. James M. Abbott, Copper, Robert Treat, Wizzard of Oz, and many others.

HONOR ROLL DAHLIAS USED AS SEED PARENT

Here is the list of Honor Roll Dahlias which we used as seed parents, and hence from which seed can be had: Andreas Hofer, Ambassador, Barbara Wear, Barbara Redfern, Betty Ivins, City of Trenton, Galli Curci, Alice Whittier, Dorothy Dix, Golden Dream, Berengaria, Edna Ferber, Elite Glory, Beau Ideal, Eagle Rock Beauty, Eagle Rock Jewel, Jersey's Jewel, Jersey's Ideals, Jane Cowl, Jane Hare, Mariposa, My Maryland, Joy, Paul Revere, Alverne, Phyllis Tucker, Trentonian, Robert Treat, Sagamore, Marmion, Kalif, Regal, Charlotte, Lafrenze, Amulet and many others.

The best seed parent was Barbara Redfern, undoubtedly one of the finest Dahlias in all existence. Pollen from several of the best Honor Roll Dahlias was used on it for its hybridization as we will presently see: Mariposa, Trentonian and Alice Whittier.

HONOR ROLL DAHLIAS USED AS POLLEN PARENTS

Practically from all varieties used as seed parents flowers were cut to use the pollen of them for good combinations vice versa on them, just according as it seemed most certain to bring out new and novel effects and variations to further perfection.

For a good illustration sake a few examples are mentioned: Pollen was taken from Amun Ra to be used on Mariposa, Elite Glory, Dorothy Dix, My Maryland and Phylis Tucker. From Mariposa pollen was used on Jane Cowl, Elite Glory, Trentonian, Barbra Redfern, City of Trenton, Berengaria, Golden Dream, Spotswood Beauty. Wherever it seemed of advantage pollen from Elite Glory was used, as for instance on Dorothy Dix, Jane Hare, Edna Ferber, Alice Whittier, Silverado, Berengaria, Golden Dream, Rose Fallon, etc. Pollen from Golden Dream was used on Paul Revere, My Maryland, Edna Ferber, Mariposa, Ambassador. On My Maryland pollen was used from City of Trenton, Barbara Redfern, Andreas Hofer, Trentonian and Amulet. On most of them pollen was used from Mariposa.

N. B.—No seed whatever was collected from Peony, Show and Pompon varieties. The customers can fully rely on it that only seed from the best decorative and cactus varieties is offered. In fact we practically grow no Peony, Show and Pompon varieties with very few exceptions as you can learn from the list of varieties. Therefore, rest all assured, you get only the best.

SPECIAL BARGAIN

In order to sell out completely all Dahlia roots on hand we are making hereby the extraordinary offer of 100 roots at only \$25.00, but our selection, however, we emphatically assure the buyers of getting exclusively the very best that is grown today. And in addition to this bargain we will add a package of seed collected from the best decorative and cactus varieties of Dahlias.

GLADIOLUS SEED

Just what was done to get superior Dahlia Seed, the same was done with Gladioli, collecting pollen from the very best known varieties, and then using it on other grand varieties, having in mind a particular improvement, either in color or in shape of flower. To a great extent also new Gladiolus species from South Africa were used in order to get entirely new breaks and types.

Price per trade package, about 500 seeds, \$3.00.

GLADIOLUS BULBS

In order to sell out completely, as we have no longer space to continue Gladiolus planting, we are ready to sell at only \$20.00 per 1000, MIXED. Send in your order at once.

RECAPITULATION

We cannot strong enough emphasize that the principal object of this 1932 catalogue is, to make it by all means possible to continue the work of scientific rose breeding along genetically tested methods, and this the more so since the results of the last three years are so promising for a real further development of the Rose for the average rose amateur.

It is confidently hoped that the rose loving public will realize that it would now seem almost a crime to let these exhaustive experiments go to ruin after they were carried on with so much sacrifice for the last four years,—to a great extent through the generous help of Dr. Wm. Crocker, Director of the Boyce-Thompson Institute, by germinating so far nearly 50,000 seedlings from almost 200,000 harvested and hybridized seeds. All the Padre asks is a reasonable order so that at least the income from sufficient orders can be applied towards the defraying of the current expenses of this work. Although of advanced age, the iron will is still there, and the desire to make good use of life long experiences in plant genetics, especially rose-breeding. But that really something in the way of necessary finances will stay in his hands, the lowest limit in unusual discounts is reached.

In starting out with this work, the Padre felt that a congenial cooperation will push this work to a glorious finish for the benefit of the whole country, and that help will not be denied him. He felt that there are surely yet some philanthropically spirited members of the American Rose Society with a little more of earthly goods than the average mortals possess, willing to help along a noble work, thereby perpetuating their names in a "Rose Monument," or better said in an endowment for a worth while "National Rose Garden." After all this is the climax of the ambitions of the Padre. In the last Rose Annual, page 41, Dr. Crocker made a special plea for such an endowment, calling it a "Rose Foundation." If all help together towards such a "Rose Foundation," even if it's through rose orders, as hereby suggested by the Padre, a start is made towards it, the first step is taken towards the right direction. With continued success, more general interest will be created, and at last the whole work will be based on a solid foundation for the future to become a credit for American horticulture and American leadership in advanced horticultural sciences. Think of it, therefore, what we can accomplish together.

As the Padre is willing to make yet in his old age the hardest sacrifices for such a noble cause, to make the world better through better roses, through a love for outdoor work around his home, it is hard to believe that anybody would stand back and not join in with hosts of noble minded rose amateurs from ocean to ocean.

Let everyone bear in mind that the plants offered are of extra quality, grand specimen plants, making it therefore doubly worth while to place an order, even if it would not be at all for the great purpose of advancing the further development of the Rose in this country. Considering the extra size of the specimen plants and the extra bargain price for them, it must stand plainly to reason that such opportunities do not come along every day, or in catalogues of the average rose merchant, merely in the business of the rose trade, but indeed very far from the hazardous work of rose breeding. As a shrewd business man he is unwilling to run any risks with thousands of seedlings. He calls his space on the bench in his greenhouse and on his fields too valuable to fool with uncertain rose breeding. The science of higher horticulture, plant genetics, has no appeal to him. But, dear rose friend, would we ever get further if all rose lovers would think so? Is it not a great blessing for rose culture in general that there are still a few enthusiasts like the Padre, willing to undergo some sacrifices and also willing to run some risks?

My dear rose friend, if you make your order large enough, you will not only gain the advantage of getting a veritable rose collection, but also to get it at an unusual discount bargain, and yet at the same time encourage a real further advancement of the Rose, bringing out entirely new features in stronger growth, new foliage and new colors, becoming yourself more and more anxious to see real rose progress from year to year. It is in this case surely not the large outlay to be in the road for the enlargement of your rose planting in your garden around the house. Therefore, make use of a good opportunity, and have a feast on roses.

As the supply is not overly large, the Padre asks kindly to give your second and third choice of variety, and also not to delay your ordering at once. Of such varieties as Frau Karl Druski, Wm. R. Smith, General McArthur and Lady Plymouth there are the most plants on hand. Of his own varieties, Charmer, Delicata, Santa Barbara Queen, Golden West, Juliet's Seedling, Gigantea Hybrid there are from 50 to 100 plants each.

On any order amounting at least to \$10.00 cash sent in, a discount of 25% will be allowed, that is to say 25% more plants may be selected and will be added, plus extra plants to cover Express charges.

On an order of \$15.00 cash in a similar way a discount of 33% will be allowed, plus extra plants to cover Express charges.

If all these concessions are fully considered, by nobody else offered to such an extent, it ought to be plain enough that it is to the advantage of every amateur to make use of this generous offer, and so help along the great problem of true rose research for rose breeding. At any rate write about your wants. Let us work together. Let me know how I can help you. How you can help me, I have now made fully plain.

Your well meaning Rose friend,

THE PADRE,

Rev. George M. A. Schoener.